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THE DECLINING BIRTH-RATE

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THE DECLINING BIRTH-RATE:

ITS NATIONAL AND INTERNATIONAL SIGNIFICANCE

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New Tracts for the Times

THE DECLINING BIRTH-RATE:

ITS NATIONAL AND INTERNATIONAL SIGNIFICANCE

BY

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Principal Medical Officer of the Local Government Board.
Author of "Elements of Vital Statistics."

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GENERAL INTRODUCTION

By the

REV. JAMES MARCHANT

THESE Tracts might have been called "New Tracts for New Times," since they interpret the signs and prophecies of a new world in the making, demanding the application of loftier ideals, more widely embracing principles, and surer methods of advance than have hitherto prevailed. They do not merely deplore and combat the manifest evils of the past and the present changing conditions, but reveal the foundations of a richer civilisation. The era of destructive criticism, of improving material environment alone, of lavish care for a short season of the unfit merely to turn them adrift at the critical age, of reliance upon forms and drugs, hospitals and penitentiaries, police and prisons and upon unfettered liberty to correct its own abuses, is mercifully passing away. We are living in a transition period, but nearer the future than the past. The wonderful nineteenth century seems already to have become history, and the first decade of the twentieth century has closed. The new spirit of the age, which appeared in wondrous guise on the horizon at the watch of the centuries, is becoming articulate. It is evident to all who possess the historic vision that we are living in the twilight before the dawn. The rapid, ruthless

progress and verily bewildering discoveries and developments of the latter half of the nineteenth century, the opening up of virgin fields of reform and of untrodden and unsuspected paths of advance, were heralds of a new day, of the nearness of the Kingdom of God.

These Tracts, small in bulk, but written by eminent authors, deal with these profound and commanding themes from this inspiring outlook. If they revert to outstanding present-day evils, it is because these menace the future and are a crime against posterity. Account is taken of the persistent and ominous demand for the divorce of religion from morals and education; of the lowering of the ideal of marriage and the substitution of a temporary contract for that permanent union which is necessary, to take no higher ground, for the nurture and education of the next generation; of the commercial employment of married women, resulting, to a serious extent, in the neglect and disruption of family life and the displacement and unemployment of men; and of the economic, social, and selfish influences which involve late marriages and an everfalling birth-rate. The writers consider the grave and urgent questions of the wastage of child-life; the weakening and pollution of the link between the generations; and the uncontrolled multiplication of the degenerate, who threaten to swamp in a few generations the purer elements of our race. They examine the disquieting signs of physical deterioration; the prevalence of vice, the increase of insanity and feeble-mindedness, and their exhaustless drain upon free-flowing charity and

the national purse; the wide circulation of debasing books and papers which imply the existence, to a deplorable extent, of low ideals amongst a multitude of readers; and some of the manifold evils of our industrial system which cause the hideous congestion of slumdom with its irreparable loss of the finer sensibilities, of beauty, sweetness and light. These and like grievous ills of the social body are treated in the "New Tracts for the Times," from the moral and spiritual standpoint, by constructive methods of redemption, with the knowledge of our corporate responsibility and in relation to their bearing on the future of the race.

The supreme and dominant conception running through these Tracts is the Regeneration of the Race. They strike not the leaden note of despair, but the ringing tones of a new and certain hope. The regenerated race is coming to birth; the larger and nobler civilisation is upon us. It is already seen that it is criminal to live at the expense of the future, that children must be wisely and diligently educated for parenthood, that vice must be sapped at its foundations, that it is much more radically necessary to improve the condition of the race through parentage than through change of environment, that the emphasis must shift from rescue to prevention. These Tracts turn the searchlight of the twentieth century upon such problems and seek to hasten the time when true religion will occupy its rightful place in our human lives, and woman her true place in the home and society, and industry will not deaden and demoralise, and life will be happier,

sweeter and holier for every man, woman and child.

These Tracts must awaken a sensitive, enlightened social conscience throughout Great and Greater Britain, which is being welded into a more compact Empire, and give voice and new life to the long-silent and thwarted aspirations for a regenerated humanity.

In their several ways, the authors of these "New Tracts for the Times," each being alone responsible for his or her own contribution, adopt this bracing and hopeful attitude towards the transcendent problems which it is the object of the promoters to elucidate.

J. M.

National Council of Public Morals,
Holborn Hall, London, W. C.
September, 1911.

The Declining Birth-Rate:

ITS NATIONAL AND INTERNATIONAL SIGNIFICANCE

CHAPTER I

A REVIEW OF RATES OF NATURAL INCREASE OF POPULATIONS

THE birth-rate of a population is usually stated in terms of the total population. This is the best method of statement, if we are concerned only with registering the actual annual contribution of the population to the next generation. By substracting from the birth-rate thus calculated the death-rate in the same population similarly calculated, we can ascertain the annual rate, if any, at which the population is increasing by excess of births over deaths, i.e. by natural increase.

NATURAL INCREASE OF POPULATION

It is convenient to state here certain international facts as to the annual rate of natural increase in some of the countries, which possess a sufficiently accurate system of registration of births and deaths to enable this to be given. The rates are taken from the Annual Report of the Registrar-General of Births, Deaths and Marriages in England and Wales, 1909:—

TABLE A

	1881-85			1901-05			1909		
	Average Rate of			*Average Rate of*			*Rate of*		
	Births	*Deaths*	*Natural Increase*	*Births*	*Deaths*	*Natural Increase*	*Births*	*Deaths*	*Natural Increase*
Hungary	44.6	33.1	11.5	37.2	26.2	11.0	37.0	25.1	11.9
Austria	38.2	30.1	8.1	35.6	24.2	11.4	—	—	—
Spain	36.4	32.6	3.8	35.0	25.8	9.2	32.6	23.4	9.2
Prussia	37.4	25.4	12.0	34.8	19.6	15.2	31.8	17.0	14.8
German Empire	37.0	25.3	11.7	34.3	19.9	14.4	—	—	—
Italy	38.0	27.3	10.7	32.6	21.9	10.7	32.4	21.4	11.0
Scotland	33.3	19.6	13.7	28.9	16.9	12.0	26.4	15.3	11.1
England and Wales	33.5	19.4	14.1	28.2	16.1	12.1	25.8	14.6	11.2
Belgium	30.7	20.6	10.1	27.7	17.0	10.7	—	—	—
New South Wales	37.7	15.7	22.0	26.7	11.2	15.5	26.9	9.6	17.3
Queensland	36.5	19.2	17.3	26.7	11.4	15.3	27.2	9.7	17.5
New Zealand	36.3	10.9	15.4	26.6	9.9	16.7	27.3	9.2	18.1
Victoria	30.8	14.7	16.1	25.0	12.7	12.3	24.6	11.2	13.4
South Australia	38.5	14.7	23.8	24.5	10.8	13.7	24.7	9.3	15.4
Ireland	23.9	18.0	5.9	23.2	17.6	5.6	23.5	17.2	6.3
France	24.7	22.2	2.5	21.2	19.6	1.6	19.6	19.3	0.3

Fig. 1. *Comparison of Rates of Natural Increase in certain Countries,* 1881-85 *(first column)* and 1901-05 *(second column).*

It will be observed that, while the rate at which natural increase occurs depends on the relationship between the birth-rate and the death-rate, in past experience the effect of high or low birth-rates in some instances has been more or less counterbalanced by high or low death-rates. Thus Hungary, with the highest birth-rate among the countries enumerated in the table, had in 1881-85 a much lower rate of increase than Australasia; so likewise Prussia during the same period, with a considerably higher birth-rate, had a much lower rate of natural increase than England and Wales. In 1901-05 a general decline of death-rates is seen to have occurred. The decline of the birth-rate may conceivably continue until no births occur; death-rates eventually will reach a point beyond which further decline is unattainable; and already in 1901-05, although in most countries this point is still remote, there is evidence that the decline in the birth-rate is overtaking the decline in the death-rate, with a resultant decline in the rate of natural increase. In Germany the balance is still to the good, the rate of natural increase being higher in 1901-05 than in 1881-85. In England and in Scotland the scales have already turned, and there is shown a declining rate of natural increase. This must not, of course, be confused with a state of matters in which the birth-rate is as low as the death-rate. France, hitherto, is the only country in which this condition has been almost established. In England and Wales the rate of natural increase was 12.4 per cent. in 1901-11, as compared with 15.1, 14.0, and 12.4 per cent. in the preceding inter-censal periods, and the in-

crease of population by excess of births over deaths in the ten years was 4,049,499 persons.

In most of the countries under comparison there is manifested a declining birth-rate. The course of the birth-rate in Great Britain is shown more clearly in Table B below:—

TABLE B

	1861-65	1866-70	1871-75	1876-80	1881-85
England & Wales	35.1	35.3	35.5	35.3	33.5
Scotland	35.1	34.9	35.0	34.8	33.3
	1886-90	1891-95	1896-1900	1901-05	1906-10
England & Wales	31.4	30.5	29.3	28.2	26.3
Scotland	31.4	30.5	30.0	28.9	26.7

In England and Wales and in Scotland the maximum birth-rate occurred in the year 1876, and since then a steady and almost uninterrupted decline has occurred in both countries. The case of Ireland needs separate consideration (pp. 20-21).

If comparison be confined to years since 1880, the years of maximum and minimum birth-rate for the countries enumerated in Table A are as follows:—

TABLE C

	Maximum Birth-rate.	*Minimum Birth-rate.*
England and Wales..	33.9 in 1881	25.1 in 1910
Scotland	33.7 " 1881	25.2 " 1910
Ireland	24.5 " 1881	22.3 " 1890
New South Wales ...	38.4 " 1884	25.3 " 1903
Queensland	38.1 " 1887	24.6 " 1903
Victoria	33.6 " 1890	24.5 " 1903
New Zealand	37.9 " 1881	25.1 " 1899
Hungary	45.6 " 1884	35.7 " 1905
Austria	38.9 " 1882	33.5 " 1908
Spain	37.1 " 1881	32.6 " 1909
Prussia	37.8 " 1885	31.8 " 1909
German Empire	37.2 " 1884	32.1 " 1908
Italy	39.0 " 1884	31.5 " 1907
Belgium	31.8 " 1881	24.9 " 1908
France	24.9 " 1881	19.6 " 1909

Exact statistics are not available for the United States of America, but the decline in the birth-rate among its native population is known to be very marked (*see also* p. 27).

Leaving Ireland out of consideration for the moment, it is clear that in France a low birth-rate had been attained in 1881, which is only now being approached in Great Britain and in Belgium. The German Empire, although its birth-rate is also rapidly declining, began to experience this decline at a later period, and is still, in regard to birth-rate, approximately

in the position which Great Britain occupied in or about the year 1881. Its position differs, however, in the important respect that it has a death-rate about 3 per thousand higher than that of Great Britain.

NATURAL INCREASE IN RELATION TO MIGRATION

The population of a country is constituted by the balance of births over deaths, and of immigration over emigration to other countries. The following Table, D, shows the enumerated or estimated population of certain countries at two intervals of fifty years, and in 1901 and 1911 or in an earlier year:—

TABLE D

	50 years	50 years	10 years	
	1801	1851	1901	1911
England and Wales..	8,893,000	17,928,000	32,528,000	36,075,000
Scotland	1,608,000	2,889,000	4,472,000	4,759,000
Ireland	5,216,000	6,552,000	4,459,000	4,382,000
Russia in Europe (not including Poland & Finland)	—	55,818,000	100,173,000	105,651,000 (1904)
Austria	—	17,525,000	26,291,000	28,568,000 (1910)
Hungary	—	13,192,000	19,366,000	20,851,000 (1910)
Prussia	—	16,935,000	34,802,000	40,163,000 (1910)
German Empire	—	—	56,862,000	62,850,000 (1908)
Italy	—	—	32,475,000	34,418,000 (1909)
France	—	—	38,980,000	39,282,000 (1909)
United States of America	—	—	77,292,000	88,262,000 (1909)

ORDER OF MAGNITUDE OF POPULATION OF THE GREAT POWERS

1850	1880	1901
Russia	Russia	Russia
France	United States	United States
Austro-Hungary	Germany	Germany
Germany	Austro-Hungary	Austro-Hungary
United Kingdom	France	United Kingdom
Italy	United Kingdom	France
United States	Italy	Italy

CHAPTER II

MEASUREMENT OF FACTORS IN DECLINE OF BIRTH-RATE

A.—*Factors for which Arithmetical Correction can be made (reduced marriage-rate, postponement of marriage, etc.).*—In considering the causes of the decline in the birth-rate, it will save confusion of thought and render reliable inferences possible if we consider separately any changes that have occurred in the fertility of the married life * of women of corresponding ages. (The corresponding ages of men have not altered to an extent which materially affects the problem.)

The decline in the birth-rate may be due either to: (1) postponement of marriage to a higher age, or (2) to a decrease in the proportion of the total female population which is of child-bearing age, or (3) to a decrease in the proportion of those who enter into matrimony, or (4) to a reduced fertility, visible when (1), (2), and (3) have been eliminated from the calculation by appropriate arithmetical allowances.

* The true rate of fertility is the total output of children by women of child-bearing ages, living under conditions in which procreation can occur. In the countries under comparison, the illegitimate birth-rate is declining. In England and Wales in 1901 only 4 per cent. of the total births were of illegitimate children. In the corrected total birth-rates given in the following tables, illegitimate birth-rates (corrected for the varying proportion of unmarried women at child-bearing ages) are included.

(1). That there has been some postponement of marriage is indicated by the English official figures, which show that the mean age at marriage of spinsters has increased from 25.08 years in 1896 to 25.73 in 1909. This postponement has not been on a sufficiently large scale to account for more than a minute proportion of the total decline in the birth-rate. There are indications that it may become a more important factor in the future.

(2) and (3). That neither a decrease in the proportion of women nor in that of wives aged 15-45 has caused the decline in the English birth-rate is demonstrated by the following figures *:—

TABLE E

England and Wales

	Number per 1,000 *of total population of*	
	Females aged 15-45	*Wives aged* 15-45
1871	231	115
1881	231	113
1891	238	112
1901	250	117

It is evident that the decline of the national birth-

* See Table, p. 41, of paper on "Decline of Human Fertility," by A. Newsholme and T. H. C. Stevenson. *Journ. Roy. Statist. Soc.*, Vol. LXIX., Pt. 1. 1906.

rate cannot be explained, except to a minute extent, by any of the above three factors. Although there has been some postponement of marriage, the proportion of women and of wives at child-bearing ages has increased. It is necessary, however, in making international comparisons to eliminate the effect of these influences before a corrected birth-rate can be obtained which will represent the true rate of fertility of compared populations. This was done in a paper by the writer and by Dr. Stevenson, now of the General Register Office, Somerset House, corrected birth-rates being obtained for a number of nations and for many parts of the United Kingdom in which the necessary arithmetical allowances were made both for the ages and the number of the wives in the compared populations. As this correction is merely a question of arithmetic, it is only necessary to refer the reader for details of the method employed in making it to the paper already quoted. The corrected rates thus obtained are employed in the following pages.

TABLE F

Total Birth-Rates

Ireland and France as illustrating the difference between crude birth-rates per 1,000 of population and corrected birth-rates, which show the actual fertility, when arithmetical allowance has been made for the age-distribution and proportion of married

and of unmarried women in the compared populations.

	Crude		*Corrected*	
	1881	1901	1881	1901
England and Wales....	33.9	28.5	34.7	28.4
Scotland	33.7	29.5	39.3	33.4
Ireland	24.5	22.7	35.2	36.1
France	24.9	22.0	25.1	21.6

Ireland, it will be seen, had, both in 1881 and in 1901, a crude birth-rate which was approximately as low as the abnormally low birth-rate of France. But when correction is made for the facts stated in the following table, a totally different conclusion can be drawn as to the relative fertility of the populations of Ireland and France.

TABLE G

	1901 *No. per* 1,000 *of total population of*		*Wives aged* 15-45 *per cent. of all females of same age*
	Females Aged 15-45	*Wives Aged* 15-45	
England and Wales....	250	117	46.8
Scotland	242	102	42.0
Ireland	235	77	32.5
France	227	119	52.5

Ireland's low birth-rate, as shown in the above table, is due not to the lower fertility of its population, but to its lower proportion of married women at child-bearing ages. When correction is made for this, the corrected birth-rate for 1901, showing the true fertility * of the population of Ireland, becomes 36.1 instead of 22.7 per 1,000 of population.

B.—*"Natalité Pathologique."*—On the other hand, France is seen to have per 1,000 of total population a larger proportion of wives aged 15-45 than there are in England and Wales; but its corrected birth-rate in 1901 was only 21.6, as compared with 28.4 for England and Wales. Its corrected birth-rate of 21.6 compares more unfavourably still with the corrected rate of 36.1 in Ireland.

France is, in fact, the best example of a pathological birth-rate, in the sense in which the term (*"natalité pathologique"*) is used by Dr. Jacques Bertillon, the head of the Statistical Bureau of the City of Paris. The causation of this fallen birth-rate, from which it will be remembered we have eliminated the influence of varying proportions of married women at child-bearing ages, will be considered in a subsequent paragraph. Meanwhile, additional facts may be given showing that France does not stand alone in having secured an abnormally low birth-rate.

* *i.e.* Under conditions in which child-bearing can occur.

TABLE H

COMPARISON OF CORRECTED TOTAL BIRTH-RATES, 1881 AND 1901 (OR APPROXIMATE YEARS)

	1881	1901	*Relative Corrected Birth-rates*	
			Birth-rate in 1881 *stated as* 100	*Birth-rate in* 1901
England and Wales..	34.7	28.4	100	82
Scotland	39.3	33.4	100	85
Ireland	35.2	36.1	100	103
New South Wales ..	38.8	26.5	100	68
Victoria	36.0	27.0	100	75
New Zealand	36.7	29.6	100	81
Austria	39.0	38.5	100	99
Prussia	39.9	35.7	100	90
German Empire	40.4	35.3	100	87
Italy	36.9	33.7	100	91
Belgium	40.8	31.0	100	76
France	25.1	21.6	100	86

Ireland alone among the countries enumerated in Table H shows a slightly increased fertility. Its low "crude" birth-rate is entirely explained by the fact that emigration, especially to the United States, has left the motherland with a very small proportion of

married women of child-bearing ages. Those married women who remain in Ireland are adding to the population at a much higher rate than the corresponding population in England. There is behind this the fact, suggestive of adverse economic conditions, that in 1901 only 32.5 per cent. of the women in Ireland aged 15-45 were wives, as compared with 46.8 per cent. in England and Wales. It may be hoped that the results of the census of April, 1911, when published, will show an increased proportion of wives among the women at these ages.

The decline in birth-rate in the other countries enumerated in Table H, varies greatly. Thus, in New South Wales the birth-rate in 1901 was 32 per cent. and in Victoria was 25 per cent. lower than in 1881. In Belgium it was 24 per cent., in New Zealand 19 per cent., in England 18 per cent., and in Scotland 15 per cent. lower than 20 years earlier. In the German Empire it was 13 per cent., and in France 14 per cent. lower than at the earlier period.

The significance of these percentages differs, for it will be seen that the 14 per cent. reduction in France was on a corrected birth-rate which in 1881 had already fallen to 25.1, while that of the German Empire in the same year was 40.4 per 1,000 of population.

I have preferred to utilise corrected birth-rates in the above comparisons, although this, owing to the lack of completely corrected data more recent than those contained in the paper already quoted, has necessitated a comparison between birth-rates thirty and ten years ago respectively. A glance at the more recent crude

birth-rates given in Table A will show, however, that the decline of birth-rate continues, and a study of all the available figures shows that this decline is gradually affecting countries which were outside its range in the earlier years of comparison.

CHAPTER III

COMPARISONS OF BIRTH-RATES IN DIFFERENT COUNTIES AND TOWNS

THE following Table, the data for which have been taken from the paper by Dr. Stevenson and the writer, to which reference has already been made, shows the birth-rate in different Counties of England and Wales, after correction has been made for variations in ages and proportion of married women to the total population in each County:—

TABLE I

CORRECTED BIRTH-RATES, 1901 (ENGLAND AND WALES 28.4)

ENGLAND—			
Bedfordshire	26.1	Dorsetshire	28.1
Berkshire	28.0	Durham	33.0
Buckinghamshire	29.8	Essex	28.7
Cambridgeshire	28.3	Gloucestershire	27.5
Cheshire	28.3	Hampshire	26.1
Cornwall	26.2	Herefordshire	31.2
Cumberland	32.9	Hertfordshire	28.6
Derbyshire	29.2	Huntingdonshire	30.1
Devonshire	25.2	Kent	27.0

Lancashire	28.0	Somersetshire	27.6
Leicestershire	27.1	Staffordshire	31.5
Lincolnshire	28.0	Suffolk	29.9
London	26.8	Surrey	26.6
Middlesex	28.2	Sussex	25.0
Monmouthshire	34.2	Warwickshire	28.5
Norfolk	28.7	Westmorland	28.2
Northamptonshire	25.9	Wiltshire	28.5
Northumberland	31.2	Worcestershire	28.4
Nottinghamshire	30.2	Yorkshire	27.5
Oxfordshire	28.6	North Riding	31.8
Rutlandshire	27.0	East Riding	28.4
Shropshire	33.2	West Riding	26.8

WALES—	
North Wales	30.9
South Wales (excluding Glamorganshire)	33.5
Glamorganshire	32.1

The highest corrected birth-rates were in the counties of Monmouth and Shropshire, the lowest in Sussex and Devon.

A comparison of recent and of past birth-rates can be made embracing some of the chief cities and towns in civilised countries possessed of accurate statistics. In order that some idea may be obtained of the continuance of the decline beyond the period for which corrected rates can be given, crude birth-rates are given for 1881 and 1901 and for 1910:—

TABLE J

COMPARISON OF CORRECTED BIRTH-RATES IN 1881 AND 1901, AND OF CRUDE BIRTH-RATES IN THOSE YEARS AND IN 1910.

	Crude Birth-rates			*Corrected Birth-rates*	
	1881	1901	1910	1881	1901
London	34.7	28.5	25.5	32.2	26.8
Manchester	36.9	32.1	27.4	32.9	29.2
Liverpool	37.6	33.4	31.1	32.5	30.8
Birmingham	37.2	31.8	28.5	34.2	28.6
Edinburgh	32.0	35.1	19.6	35.0	28.1
Glasgow	37.3	31.9	25.1	36.3	32.0
Dublin	32.1	31.5	28.3	32.2	35.4
Belfast	33.4	32.2	27.8	34.7	34.0
Berlin	38.1	24.8	21.5	33.1	21.9
Hamburg	37.4	26.9	23.2	35.0	25.4
Paris	27.6	20.6	18.0	23.3	16.7
Providence, U. S. A.*.	26.5	26.0	—	21.1	23.1

* Comparison of 1875 and 1900.

It will be more convenient to discuss certain aspects of the above city birth-rates at a later stage. It suffices here to draw attention to the remarkable experiences of Britain, Hamburg, and Providence, Rhode Island. The two great cities of Germany are seen to be rapidly following in the footsteps of Paris in reduction of fertility, and there appears to be much likelihood that ere

long their birth-rates, like that of Paris, will be nearly as low as their death-rates.* It is unfortunate that registration of births is absent or defective in the greater part of the United States. In parts of New England the statistics available enable a comparison to be made between the native-born and foreign-born populations. The following table, taken from the joint paper already quoted, shows some of the results:—

TABLE K

CORRECTED LEGITIMATE BIRTH-RATES

	Boston, 1900	*Providence*, 1900
Native-born	18.2	16.0
Foreign-born	31.1	31.1

Evidently the fertility of the native-born populations of these cities is little, if any, greater than that of Paris; and they may be said, like Paris, to have arrived at a position of stagnation of population, if not of actual decrease, apart from immigration.

In the preceding summary of well-ascertained facts as to the birth-rate in this and other countries, an endeavour has been made to handle the available material methodically, and to lift the explanation or explanations of the decline in birth-rate which has been already experienced out of the region of conjecture and impression.

* In the five years 1906-10 the average birth-rate of Paris was 18.3, the corresponding death-rate 17.5 per 1,000 of population.

As the proportion of illegitimate births is small, fertility is chiefly a function of married life. Malthus, in 1796, advocated postponement of, or abstinence from, marriage as a means of checking the risks involved in the alleged tendency of population to multiply more rapidly than the means of subsistence. The rate at which the population multiplies by excess of births over deaths is now steadily slackening, although, as shown in the previous pages, this is not to any considerable extent due to diminished or postponed matrimony. It must, therefore, be caused by diminution in the fertility of married life, and, it may be added, to a less extent, by diminution of illegitimate births. By means of the corrected birth-rates given in the previous pages, differences in various communities caused by varying proportions of wives at child-bearing ages have been eliminated; and it has been shown that in most civilised communities there has occurred a real and marked reduction in the fertility of marriage.

CHAPTER IV

CAUSATION OF THE REDUCED BIRTH-RATE

We may now pursue our review of the historical facts as to the fertility, having removed from the statistics the disturbing influence of variations in ages and in proportion of married women of child-bearing ages to the total population.

The reason for making this preliminary correction will not be misunderstood. Postponement of marriage and avoidance of marriage, when they occur on a large scale, are serious sociological indications. It is conceivable that the size of families of married persons might be kept up to the high figures of 1880 and thereabouts, and yet that marriage might become so unpopular—or be regarded as so economically disadvantageous—that the birth-rate declined rapidly, because comparatively few persons married. But that is not the historical state of matters with which we have to deal. Postponement and avoidance of marriage have had little share in causing the reduced birth-rate experienced in this and some other countries during the last twenty years. There has been a great decline of fertility when women of equal age and marital condition in a country are compared with the women of the same country twenty years earlier.

It is possible, however, that in the future the present smaller families in married life may be followed by re-

volt against the marriage tie among a larger proportion of the total population, though it is beyond the scope of this paper to do more than note this tendency.

It being established that for equal numbers of married women of child-bearing ages, the number of children in various countries and in many parts of the United Kingdom is much fewer than in the past, it remains to be seen whether any recognisable *direct* influence has been at work, which has tended to lower the birth-rate; and what are the *indirect* influences, which may be considered as having affected the birth-rate, such as economic and social conditions, habits of life, and possibly education and occupation.

THE INFLUENCE OF INCREASED NUTRITION

It is a commonplace observation that children are often fewer in well-to-do than in poorly-circumstanced families. The poor curate and the labourer alike are examples quoted in this connection, in contrast with those endowed with wealth. Few systematic attempts have been made to place observations of this kind on a firm basis, and although it is possible that over-nutrition may lessen fertility, it is incredible that a condition of increased nutrition can have become so widely prevalent as to be competent to produce the national and international changes in fertility set out in preceding pages.

The exact extent to which the so-called "True Law of Population," enunciated in Doubleday's book, published in 1841, under this title, operates must be still

a matter of conjecture. It is extremely unlikely that his statement to the effect that throughout both the animal and vegetable kingdoms

> "Over-feeding checks increase; whilst, on the other hand, a limited or deficient nutriment stimulates and adds to it"

is anything more than a fragment of truth. So far as the vegetable kingdom is concerned, it is, within certain limits, contrary to experience, carefully tested experimentally. No such self-rectifying arrangement as this can be regarded as possible under present conditions, if under any conditions, of human society; and it is doubtful whether there is lower fertility among the rich, when not voluntarily produced; and still more doubtful that this, if present, can be ascribed to high nutrition.

That Doubleday's hypothesis does not explain recent events in the countries enumerated in Table H is evident from a study of the international facts. It is highly improbable, for instance, that the average nutrition of French wives is so much higher than that of Irish wives as to account for a difference in corrected birth-rates of 21.6 and 36.1 per 1,000 of population; or to account for a difference between 28.4 and 35.7 in England and in Prussia respectively. The hypothesis similarly fails to explain the difference between the birth-rate in the cities and towns enumerated in Table I, and between these and the birth-rates of the countries in which they are respectively situate.

INVERSE RELATIONSHIP BETWEEN "INDIVIDUATION" AND "GENESIS"

Doubleday's incomplete hypothesis was criticised by Herbert Spencer * in the 'fifties. The complete truth according to him is that, as a necessity of evolution, fertility diminishes with that intellectual and moral development of the race which is comprised within the meaning of the word civilisation. Darwin similarly concluded that changed conditions of life have a remarkable and specific power of acting repressively on the reproductive system. It is however, doubtful, if, on a general scale, any inverse relationship whatever exists between cerebral development and the capacity of men and women to procreate.

In sample experiences derived from Peerage and Baronetage lists, a reduction of families is shown in recent periods. Whetham† gives the results of a hundred fertile marriages for each decade from 1831 to 1890, taken consecutively from those families who have held their title to nobility for at least two preceding generations:—

Period.	*No. of births to each fertile couple.*
1831—40	7.1
1841—60	about 6.1
1871—80	4.4
1881—90	3.1

* "A Theory of Population deduced from the General Law of Animal Fertility," by Herbert Spencer, 1852.

† "The Family and the Nation," by W. C. D. and C. D. Whetham, 1909, p. 139.

Thus during fifty years a stable upper class have reduced their fertility by more than one-half. It can scarcely be argued reasonably that the state of nutrition or the intellectual capacity of parents so circumstanced had so increased as to account for this result.

After the data of the census of April, 1911, have become available, this question can be discussed with profit, because of the new inquiries which have been made as to fertility in different social strata, the results of which will then be available.

Meanwhile all the facts point to the conclusion that

is the chief and vastly predominant cause of the decline in the birth-rate which is taking place in so many countries.

At a later stage the economic and other indirect causes which may have led to this voluntary restraint of fertility, and the possible effect of its differential operation on our national position will be considered. Meanwhile, it is necessary to establish the probability that the predominant cause of the decline in the birth-rate is volitional.

That the practices thus indicated are widely prevalent is well known. The extent to which this is the case can only be realised by those who have made inquiries into the subject. The advertisement pages of daily and weekly newspapers give some enlightenment; and the testimony of experienced medical men shows

how widespread is the use of artificial means for the prevention of conception. There are reasons for thinking that the practice of producing abortion by the use of drugs or otherwise may also be increasing.

In *The Times,* of October 16th, 1906, Mr. Sidney Webb gave the result of a voluntary confidential census among a class of "intellectuals," from which it appeared that of 120 marriages, 107 were "limited" and 13 "unlimited," the average number of children of each of these marriages being considerably under two. This is the only direct statistical evidence, so far as I know, on the subject.

Mr. Webb also quoted (*The Times,* October 11th, 1906) the experience of the Hearts of Oak Friendly Society, which gives a "lying-in benefit" of 30s. for each confinement of a member's wife. From 1866 to 1880 the proportion of lying-in claims rose slowly from 217 to 247 per 1,000; and then continuously declined from 1881 to 1904, when it reached only 117 per 1,000 members. Even if large allowance be made for sources of statistical error, it is highly probable that in the family experience of this particular Friendly Society—which has over 272,000 adult male members—there has been a large decline in fertility.

A similar change is seen in the experience of the Peerage quoted above. It is also seen in the experience of various countries and towns, as stated in preceding tables.

This decline in the birth-rate might be due either to an increased number of sterile marriages or to smaller families. At present there are no English data en-

abling a distinction to be made between these two possible causes of a low birth-rate; but French, Danish, Swedish, Australian and other statistics agree in showing that it is the latter with which we are chiefly, if not solely, concerned. If there were any widespread diminution of procreative power, an increased proportion of sterile marriages might reasonably be expected; and the fact that this has not occurred at once raises a presumption—confirmed by all the available facts—that the fall in the birth-rate is principally due to causes within the control of the people. The same conclusion is confirmed by the fact that in countries under the influence of the Roman Catholic religion, which banns preventive measures against child-bearing, as in Ireland, and among the French Canadians, the corrected birth-rate remains high.

CHAPTER V

INDIRECT FACTORS OF THE REDUCED BIRTH-RATE

THERE is no reasonable doubt that the decline in the birth-rate, which is one of the most striking features of the last thirty years,* has been principally caused by volitional regulation of the size of the family. What are the influences which have led parents to regulate the size of their families to an extent which has produced enormous declines in national birth-rates?

The facts enable us to eliminate race and most social conditions except religion as having had more than an auxiliary influence in bringing about the effect under consideration; and the influence of religion when manifested appears to have been exercised by inhibiting any action interfering with normal fertility.

Poverty.—The influence of poverty is somewhat more difficult to unravel. The possible effect of poverty in keeping down excessive nutrition and in thus enabling the supposed inverse relationship between "individuation" and "genesis" to operate has already been discussed. It is impossible to ascribe to any such influence a large share in the enormous changes of fertility manifested during the last thirty years.

* In England as a whole the birth-rate began to decline in 1876, but in different parts of the country earlier or later than that year. Germany's decline began many years after that of England, while the decline in France dates back for a long series of years.

Industrial Conditions.—But if the generally higher standard of comfort now prevailing among the industrial classes has had no considerable effect in reducing fertility by physiological means, it may be that changes in economic condition, when combined with a more generally disseminated knowledge of artificial means for limiting the family, have led to effective efforts in this direction; while similar economic changes may not have had the same effect in earlier years, owing to the absence of available information on the subject or the presence of a different standard of conduct, or owing to both of these causes.

Knowledge as to artificial means for limiting the family has become widespread during the period in which the reduction of birth-rate in Great Britain has occurred. During the latter part of that period certain industrial and economic influences have been acting which might increase the wish to utilise the new knowledge. Among these, mention may be made of the relation between the fall in prices and in the birth-rate on which stress is laid by Mr. Udny Yule.* He draws attention also to the fact that the fall in the fertility rate was greater during 1891-1901 than for any previous decade, and that this does not correspond with the course of prices; and suggests as a contributory cause the increasing pressure on the labour market. In the years before 1876 there had been a very high birth-rate; from thence onwards a rapid fall in the death-rate occurred, thus greatly increasing the supply of adults provided

* "*Journal Roy. Statistl. Soc.*," Vol. lxix., Pt. i., March, 1906.

by a given birth-rate. The increase at ages 20-55 of males in the population in successive decades is given by Mr. Yule as follows:—

INCREASE IN EACH DECENNIUM IN THE NUMBER OF MALES AGED 20-55

	Per. Cent.
Increase in 1851-61	10
" " 1861-71	12
" " 1871-81	14
" " 1881-91	14
" " 1891-1901	19

It has to be remembered in drawing inferences from the above figures that by the method adopted in preceding tables the effect on the birth-rate of postponement of, or abstinence from, marriage has been eliminated, and that what remains to be explained is the diminished fertility of married life at the ages of fertility. Hence, any effect which industrial pressure has produced on fertility will have been produced apart from involuntary physiological causes and most probably through volitional control.

Similar remarks apply to the special experience of textile towns like Huddersfield, Oldham, Bradford, Blackburn, Burnley, and Halifax, in which, between 1881 and 1903, the corrected birth-rate declined 22, 24, 26, 32, 32, and 32 per cent. respectively.

In the earlier years of these industries each child was his parents' savings-bank, from which savings could be drawn as soon as the child could go to the mill as a

half-timer. Now the age at which the child's immature strength can be exploited has been retarded, and the child is a less profitable asset than in the past. The fact that families have become smaller in association with this retardation of children's work, and in association with the continuance of married women's work in mills, does not necessarily imply deterioration of the ideal of family life below that of the period of large families. The difference may be merely the difference between ignorance and knowledge of means for limiting the family.

THE PROGRESSIVE DESIRES OF MANKIND

In very many instances it may be unselfishness—possibly mistaken in its object—which has led to the limitation of the family. The head of the family, earning a limited wage, whose family budget is already scarcely within the parsimonious possibilities of the weekly wage, hesitates—and naturally hesitates—to add to the burden which he and, still more, his already overburdened wife bear from day to day.

And this desire to alleviate the burden of family life may be associated with a very proper desire to raise the standard of family life. The desires of mankind become more numerous and varied with each added possession. When these desires lead to interference with family life in persons who are able to meet the normal requirements of a normal family, selfishness may be regarded as having become the chief motive. The increasing rarity of the altruism which welcomes the

burden and joy of family life, in those who are well able to bear it, is one of the most unfavourable features of the present day. The ideal of portions of the community, especially of a large proportion of that part of it which has sufficient or abundant means, is one which is almost pagan in its outlook. Their sense of communal responsibility is undeveloped, and their main object appears to be "to warm both hands before the fire of life," but, as Mr. W. S. Lilly has remarked, with prudence so as not to burn their fingers.

Over-prosperity may imply a serious moral danger. While among the artisan classes and among the even harder-pressed lower ranges of the commercial and professional classes there may be economic reasons tending towards restricted families,* the same excuse cannot be urged for those in easy circumstances. The reduced fertility in the prosperous classes named on page 32, is an instance in point; and the lowered fertility in Berlin and Hamburg, representing pre-eminently the new Germany, prosperous and wealthy, shows that the Germans can no more resist the temptations of prosperity and luxury than ourselves.

It would not be fair to omit from consideration what is probably one of the chief factors tending to restrict families. This is the desire of parents with small incomes to educate their children more satisfactorily than they themselves were educated, and to give their children the means for rising in the social scale.

* I do not say that this is the case, given proper distribution of work and workers, and equitable distribution of the fruits of work.

The motive here is far removed from that of the well-to-do who love ease and luxury and pursue it; and however much the supposed need for this regulated family may be deprecated in these instances, a harsh judgment in regard to it cannot be entertained.

CHAPTER VI

POSSIBLE EFFECTS OF ALTERED DISTRIBUTION OF FERTILITY

THE contents of the preceding paragraphs naturally lead to a discussion of the influence of the present distribution of the restricted birth-rate on national physique, intellect, and character; after which a wider survey may be taken of the tendencies to stagnation of population at present manifesting themselves.

FERTILITY IN RELATION TO SOCIAL STATUS

Professor Karl Pearson has stated that 25 per cent. of the married population produce 50 per cent. of the next generation; and basing his conclusion on a comparison between birth-rate and the proportion of (*a*) female domestic servants, (*b*) professional men, (*c*) general labourers, (*d*) pawnbrokers and general dealers, in a number of selected districts, Dr. David Heron, in a Drapers' Company Research Memoir, has concluded that the intensity of relationship between undesirable social conditions and a high birth-rate has almost doubled in fifty years.

Statistics like the above, and the unequal distribution of the decline in the birth-rate illustrated in the preceding pages, have led Professor Pearson to say that "the mentally better stock in the nation is not reproducing itself at the same rate as of old—the less able

and the less energetic are the more fertile . . . for the last forty years the intellectual classes of the nation, enervated by wealth or by love of pleasure, or following an erroneous standard of life, have ceased to give in due proportion the men wanted to carry on the ever-growing work of the Empire."

It is necessary to remember, however, (1) that the contribution to a future generation is not necessarily directly proportional to the birth-rate, but is governed by the excess of births over deaths before the reproductive period of life; and (2) that special fitness to replenish the world is not a monopoly of class, but occurs in stocks which are found in every social stratum.

THE VARYING CONTRIBUTION TO THE POPULATION AT CHILD-BEARING AGES FROM A GIVEN NUMBER OF BIRTHS

I have shown elsewhere that there is no necessary relationship between large families and a high infant mortality.* In different counties of England and Wales coincidence of high and low birth-rates with low and high rates of infant mortality are to be found; and the combined experience of forty-six counties is expressed in the fact that the co-efficient of correlation between their birth-rates and their infant death-rates for 1901-5 was represented by the low fraction .36. The connection often observed between a high birth-rate and a high rate of infant mortality is due in great part to the fact that large families are common among the poorest

* "Report on Infant and Child Mortality" (Cd. 5263).

classes, and these classes are especially exposed to the degrading influences producing excessive infant mortality.

The common association of circumstances of social inferiority with a high birth-rate implies similarly a smaller number of survivors to adult life than under better social conditions. This is illustrated by the following examples from local life tables:—

Of 1,000 Female Children born in each District the Number of Survivors at each of the Following Ages was:—

Age	*Brighton* (1891-1900)	*Hampstead* * (1901-1905)	*Shoreditch** (1901-1905)
0	1,000	1,000	1,000
15	763	859	711
25	743	844	689
35	711	821	651

* From Report of the Medical Officer of the County of London for 1907.

It is evident that, out of a given number born, the contribution to the future adult population of a borough like Shoreditch, with a high birth-rate, is at a lower rate than that of districts like Hampstead and Brighton, in which the birth-rate is low.

It may, however, be accepted as a fact that during recent years the population has, owing to the restriction of the birth-rate among other classes, been recruited in a somewhat increasing proportion from the wage-earning classes. The wage-earning classes have always

formed a large majority of the total population; and their birth-rate in the future, as in the past, must determine the main composition of the people. The wage-earning population is the source, in the main, generation after generation, of the other classes of the community; and it is well for those other classes that it is so. The mere fact then, that, so far as can be ascertained, these wage-earning classes are contributing an increasing proportion to the people, may be regarded with complacency, unless it can be shown further that the distribution of the birth-rate among wage-earners is unfavourable to the handing-on of their best qualities to future generations. The Table H of the geographical distribution of corrected birth-rates gives some indications on this point. Dr. Heron's statistics, mentioned on p. 42, tend to show, though not conclusively, on a considerable scale, that there is an increasing relationship between a high birth-rate and "undesirable social conditions." If it be assumed that the careful artisan is beginning to adopt the policy of a restricted family, and that the unskilled labourer is not doing so, certain considerations will need to be borne in mind before regarding the phenomenon in question with excessive apprehension.

In the first place, such change in the distribution of the birth-rate as has occurred, has not, so far as we know, been going on for more than two generations, and to change the general character of a population a much longer period than this is required.

In the next place, it has to be remembered that the condition of the poorest classes has greatly improved

as compared with that of two generations ago. In the essentials of life, food, clothing, and housing, the conditions of the very poor are equal to those of the artisan early in the nineteenth century. The effect of such conditions will depend on the extent to which the poorest classes belong to an inferior type—whose social position has in the course possibly of generations resulted from their inferiority—and on the extent to which they are remediable by improved environment. This point is discussed later.

POVERTY IN CHILDHOOD AND ADULT FITNESS

Notwithstanding these considerations, it cannot be regarded as satisfactory that the birth-rate has declined to the greatest extent among those living in comfortable circumstances.

In past centuries population was restrained by the positive checks of war, famine and pestilence. These checks, in civilised countries, have now been almost completely averted. Even now, however, direct checks on survival to adult life are acting, though to a greatly diminished extent. Among the chief of these are insufficient care in sickness, and defective nutrition of children. The effect of poverty can be seen in the fact that the rate of natural increase of the population (by excess of births over deaths) is not so much higher among the poor than among the well-to-do as it would be were the death-rates equal in the two classes. This higher death-rate among the poor undoubtedly implies also some physical inferiority of those who escape the risk of death.

The physical condition of the survivors to adult life under conditions of poverty is less satisfactory than that of survivors in populations of superior social position. The report (1882-3) of the Anthropometrical Committee appointed by the British Association in 1875 showed clearly that a difference of 5 inches existed between the average stature of the best and the worst nurtured classes of children of corresponding ages, and of 3½ inches in adults. More recent observations among school children show similar differences.

It is not improbable that corresponding differences in mental conditions are to be found.

These statements, however, do not exhaust the problem. The question remains whether these differences are inherent and more or less irremovable, or are due to unfavourable external conditions of life, and therefore preventible.

FITNESS NOT A CLASS CHARACTERISTIC

The answer, so far as physical fitness is concerned, may be contained in the anthropological view that there is a certain physical standard which is the inheritance of each race; and that although certain sections of the population may deviate from the average standard, for instance, as the result of the deterioration caused by poverty with its attendant ignorance, squalor and bad feeding, the deviation is not transmitted from generation to generation. As the late Professor D. J. Cunningham put it: "To restore, therefore, the classes in which this inferiority exists, to the mean standard of

national physique, all that is required is to improve the conditions of living, and in one or two generations the ground that has been lost will be recovered."

If, then, on this hypothesis it were necessary for the population in the future to be recruited chiefly from the above stratum of society, there is no necessity to fear physical degeneration of the population if steps be taken to counteract the effects of poverty. Given appropriate social organisation, this is practicable.

Whether this view represents the whole truth or only a portion of it, it cannot be said that measures for national improvement through influences affecting the environment have been exhausted, or, indeed, have begun to be fully utilised. They need to be extended on a large scale, while giving encouragement to measures tending to diminish the multiplication of the admittedly unfit. The time spent in bemoaning the disproportionate contribution to the population of the very poor, were better spent in promoting the more efficient prevention of destitution, while preventing the multiplication of the small minority having definitely heritable defects (*see* p. 51), and of those who will not or cannot support themselves and their families, and will not or cannot co-operate with the State in providing by insurance or otherwise for the days when unemployment or sickness renders self-support precarious.

The question of intellectual fitness is more difficult. Much evidence has been adduced tending to the conclusion that certain social strata manifest a much higher proportion of intellectual ability than others. The

statement—given that success in life is a satisfactory test—is beyond dispute. But the interpretation of the facts is open to doubt. The fact that the children of the successful emerge above a given datum line, taken as the line of success, may be regarded as being due to inherent family qualities. It is also open to the explanation that the continued family success may be due, in at least a high proportion of the total cases, to the favourable environment of the children of the able, to their possession of all the means of training for success, and to the opportunities and advantages secured by a public school and University career, as well as by the successful position of the father.

There are doubtless families of exceptional ability, for whom the occurrence of an auxiliary favourable environment is a matter of minor importance. But even the greatest ability may fail through lack of favouring circumstances; and it is impossible to say how many mute inglorious Miltons may have failed to be discovered. The fact that the poorest are lowest in the social scale cannot be used as a completely satisfactory argument that—as proved by selection—they are the poorest stock. The results, so far as they are concerned, may have been biased by conditions that have thwarted natural competence. Obviously the word "success" in this connection is used in an artificial sense. Success in a better sense comes to the majority of the total population in opportunity and ability to exercise craftsmanship, intelligence and moral worth.

No statistics free from the errors due to varying

circumstances appear to be possible as to the relative ability of different classes. The history of the many who, notwithstanding social disadvantages, have attained to the highest positions in law, medicine, the Church, or in other branches of the work of the State, shows the need for caution in drawing conclusions as to the social distribution of ability. The only statement that is certainly true is that both intellectual and physical fitness are a function of stock, not of class.

Summarising the preceding facts, it may be accepted that the birth-rate at present is disproportionately high among the wage-earning and probably also among the poorest classes. Also that this implies the survival of a disproportionate number who are relatively ill-fed, ill-nourished, and brought up under conditions rendering them less fitted to become serviceable citizens. But (*a*) the present altered distribution of the birth-rate is only known to have been occurring for two generations; (*b*) the conditions of life of the poorest are steadily having more attention devoted to them, and there is good reason to expect that in two additional generations their possibilities of health will be still further improved; and (*c*) it is not certain that the average inherent mental and physical qualities of the majority of the wage-earning classes are not equal to those of the rest of the population, though there may possibly be some meausure of inherent inferiority among a section of the poorest of the population.

THE INHERITANCE OF DEFECTS

So far the question has been discussed as one chiefly of inheritance of physical and mental competence. It is, perhaps, more strictly a question of inheritance of defects. Such defects are undoubtedly sometimes hereditary, and the discouragement of parenthood among the unsound is an important function of public opinion, if not also of the State as such, which has hitherto been much neglected.

When such defects as, for instance, feeble-mindedness, or a strong family history of insanity are discovered, it is highly desirable that their propagation to another generation should be prevented.*

At every step, accurate conclusions are made difficult by the absence of complete records; but it is doubtful whether such cases as the above form more than a small proportion of the total population of our workhouses or prisons. Striking family histories have been published, in which related persons have, generation after generation, been supported by the public, either as paupers, or in asylums or prisons. But we do not know to what extent these results would have occurred had the

* It should be noted that Dr. W. Bateson, speaking recently on the eugenics of Mendelism, warned his audience of the need for caution in forbidding marriage in any case except where feeble-mindedness or some such defect was so marked as to render the individual certain to produce children of his own type. We may conclude that an indispensable praecondition of any attempt to apply practically the important principles of eugenics, in regard to any particular disease or defect, must be the collection of evidence on a sufficiently large scale which justifies intervention.

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children been efficiently protected from an obviously evil environment. Pauperism and crime are probably truly hereditary in only a small proportion of their total amount. If this be so, the possibility of their control becomes an easier problem. For the majority it is highly probable that if the community gives the children a fair chance of success, in the reasonable belief that the expense will not be a recurring expense, this expenditure will be more than justified by results.

CHAPTER VII

NATIONAL AND INTERNATIONAL FORECASTS

Will the Restricted Birth-Rate Become General?

Assuming, as is likely, that the conditions of the poor and the opportunities of success for their children will steadily improve, the jeremiads of those who deplore the evil possibilities involved in the differential deduction of the birth-rate are not likely to be justified. Within two generations of the profoundly important changes which have produced this differentiation, it is too early to indulge in pessimism, even were the vast assumptions involved in such pessimism to be established. A reduction of human fertility has taken place in this country implying a reduction in the crude birth-rate of England and Wales of over 28 per cent. between 1877 and 1909. Will the proportion of the population hitherto unaffected by this influence continue to escape? Is it not more reasonable to assume that knowledge in their case will be followed by action, as it has been already among the artisans of Halifax, Burnley, Bradford, Leicester, Derby and Northampton, and to a less extent in many other towns?

It is easy to assert that among the poorest there is no stimulus to the "providence" which shows itself in small families. Their infants may be fed from a municipal milk-depot, and subsequently receive free din-

ners as well as free schooling, and he helped at every stage. Would that this were more generally true, until labour is more systematically decasualised, and a more effective control is exercised over self-indulgent parents who neglect their children. But, under present circumstances, experience among the poor shows what an enduring self-denial, often to an heroic extent, the life of the mother of a large family of small children in a poor home implies. It has many compensations; it can bring out the noblest qualities, both in mother and in children. But it is highly improbable that the younger married woman of the class to which the mother thus sorely tried belongs will, with increasing knowledge, refrain from following the example of the married woman who—without the excuse or justification which the heavily taxed mother in a poor family may claim—has chosen the path of self-indulgence.

We may then, I think, in the absence of new and at present invisible influences to the contrary, look for an extension of the practice of voluntary restriction of families, and possibly also to a relatively stagnant population like that of France.

INTERNATIONAL CONSEQUENCES OF A RESTRICTED BIRTH-RATE

It cannot be regarded as a matter of indifference whether the unfilled portions of the world shall be peopled by Eastern races (Chinese, Japanese, Hindoos, etc.), by negroes, by Sclavonic or other Eastern European peoples, by the Latin races, or by the races of

Northern Europe. Experiments on a gigantic scale in the fusion and multiplication of races are going on in the United States, and more recently in Canada, in which all well-wishers of the best civilisation must be intensely interested; and the problems of South Africa and Australasia are only less important than those of the American continent. The conditions of the problem, especially in view of the increasing refusal of western Europeans, Americans and Australians to multiply to a normal extent, are becoming artificially biased. In North America it may be a question not only of black and white, but also of Sclavonic races against Anglo-Saxons; in Australia, and possibly also in the American continent, it may become a question of Mongolian against European races. The problems suggested by current events do not appear likely, so far as can be seen, to be solved in the course of the next few generations by the adoption of the policy of the restricted family by the countries and races not at present adopting the practices leading to this result; though the current experience of Germany, which is now increasingly following the lead of France and England in this respect, makes the need for caution in forecasting obvious.

It is impossible to follow further the speculations suggested by such considerations as the above. Every Briton will wish that his race may have a preponderant share in shaping the future destinies of mankind. Although it appears certain that English-speaking races will exercise this predominating influence—the course of events in North America, in Australasia and South

Africa, points to this conclusion—these English-speaking countries, unless the trend of events is changed, will become occupied by Anglo-Saxons to a relatively diminishing extent. We must not, however, blind ourselves to the dangers of prophecy.

UNCONFIRMED FORECASTS

History is studded with forecasts which events have falsified, of fears and pleasurable anticipations which have not come true.

The population question, in particular, is one in which thoughtful men have alternatively been racked by fears of depopulation or, at least, stagnation of population and of the excessive growth of population. Until the end of the Napoleonic wars, the most prevalent fear was that men would fail for fighting and oak would fail for the building of ships of war. Nelson particularly commended the planters of oak trees, as did Napoleon the parents of large families. There were not wanting those who defended the old Poor Law, because it enabled the labourer to marry early and breed quickly.

On the contrary, when the fears raised by Malthus led would-be benefactors of the species to urge upon the labourers to make pause in increasing the supply of labourers, Carlyle derided the possibility of this contingency in the following words:—

> "Millenniums are undoubtedly coming, must come one way or the other: but will it be, think you, by twenty millions of working people simulta-

> neously striking work in that department; passing, in universal trades-union, a resolution not to beget any more till the labour market become satisfactory?"

And yet artisans have begun, in many towns partially, to make pause in the direction indicated in the above quotation; and labourers may hereafter follow this example.

The first half of the nineteenth century was filled with fears of the consequences of the working out of Malthus's hypothesis. From 1890 onwards, our journals have been largely occupied with forecasts based on the decreasing birth-rate. It may be that unforeseen changes in the trend of events will occur; that, for instance, as difficulty in securing workers increases, the increased economic prospects of children will once more tend to be followed by large families. But in regard to this, it has to be borne in mind that a new factor, the association of marriage with volitional control of fertility, has entered into the problem; and it appears more likely, under present ethical conditions, that personal comfort will carry more weight than roseate prospects for prospective children.

CHAPTER VIII

SOME POSSIBILITIES OF ACTION

THE objects of this contribution have been to state the problem under consideration, the reduced birth-rate, to trace its causes, and to discuss its possible national and international effects. It would be proper to close with the fulfilment of this task. When it is considered that the matter in question affects a large proportion of the total population of a number of great countries, and that it has been produced—unless the evidence lies—in the main by the volition of the peoples concerned, the inevitable conclusion appears to be that no change in the distribution of the birth-rate and no increase in its magnitude can be secured except by alteration of the popular will.

In regard to the feeble-minded, the intermittently insane, and possibly the chronically dependent, it may be hoped that public opinion will ere long demand that these should not be permitted to multiply. It may even be hoped that social pressure will be exercised towards diminishing multiplication in families which are non-supporting.

Apart from these immediate exceptions the best distribution of the birth-rate can only be secured by the exercise of public opinion, which has an undoubted effect on individual conduct.

Public opinion might possibly operate directly. It is

more likely to be successful, in the near future, if directed towards a change in the luxurious and extravagant habits which are so widespread. In every station of life there is seen a struggle to keep up appearances and a tendency to ape the luxuries of the more wealthy. Preaching and teaching, and still more, the force of example, which would induce the rich to realise that they may be responsible, by their manner of life, for extravagance in others, would be most valuable. Even though it is not likely that we shall see any revival of former sumptuary laws, it may be hoped that a wholesome public opinion will act in the direction of restraint of lavish living, even among those who can afford it. The desire for "society" and pleasure is an important factor in reducing the birth-rate and in spoiling family life.

The desire of parents to leave their children well provided for may be more tenderly dealt with, though, given a good start in life, it is doubtful whether in the majority of instances the knowledge that money will subsequently be inherited is not an impediment to success in life.

Perhaps even more important is definite teaching of the privilege of parenthood. There are great possibilities of educational work in this direction, and public opinion can exercise an equally important influence.

Along with this should be pointed out the undesirability of small families, and especially of families in which there is only one child. The "one chick" is apt to be self-conscious and selfish; is often unhappy,

and the cause of much unhappiness to others throughout his or her life.

During recent years proposals have been made in the direction of the endowment of motherhood. That child-bearing among the wage-earning classes may be normal, and that the infant born may have a reasonably good prospect of survival and of healthy life, conditions are needed during the later months of pregnancy, and after the birth of the infant, which often are lacking. The State has made certain efforts in improving matters, by regulating the hours of industrial labour of women, by paying for medical aid during confinement under certain conditions, by forbidding industrial labour for four weeks after confinement, by securing the early notification of births, and the visits of advice of health visitors. More recently the State, in the National Insurance Bill of 1911, proposes to contribute towards the maternity expenses of insured women and of the wives of insured men. All this—and, doubtless, other allied and extended proposals, will follow—implies the recognition of the State that it is vitally concerned in the conditions under which infants are procreated, born, and reared.

I have purposely said little on the ethical aspects of the problem of artificial limitation of families. It does not appear possible for such a policy to be pursued on a large scale without moral loss to the community. That, however, is not my subject. My task is completed now that I have set out, so far as I can, the facts and conditions of the problem of population.

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